or contrast. It also allows for sizing of balloons and stents and assessment of the hemodynamic effects of intervention.

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SS12.

Fistula First: A Timely Approach for Successful Dialysis Access?

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Objectives: National Kidney Foundation Disease Outcomes and Quality Initiative (KDOQI) recommends arteriovenous fistula (AVF) as the first choice for hemodialysis access. However, AVF creation does not predict access success. Primary objectives of the study are to determine the time from AVF placement to first use, intervention, abandonment, or failure.

Methods: Retrospective review from July 1, 1998 to June 30, 2008, identified 483 patients who underwent dialysis access procedures and included 240 patients who received an initial AVF. Study endpoints included time from placement to first use, intervention, abandonment, or failure. Patient demographics, clinical characteristics, and comorbidities were compared by endpoints. Statistical analysis included χ^2 and Kaplan Meier analysis and Cox proportional hazards modeling.

Results: One hundred thirty seven of 240 AVF (57.1%) were used for hemodialysis; 76 (55.5%) matured without intervention; 61 (44.5%) required intervention. Mean time to first use was 29.2 weeks and for those requiring intervention 37.0 weeks. Of the 103 remaining patients, 58 AVF were abandoned or failed, 26 AVF were patent but never accessed, and the remaining patients died or were lost to follow-up. Mean time to abandonment was 44.0 weeks and to failure 19.5 weeks. By multivariate analysis, diabetes was the only patient characteristic significantly associated with abandonment or failure.

Conclusions: Despite KDOQI recommendations, time to first AVF use is long; interventions are frequently required; and abandonment, failure, and non-use are common. These findings call into question our "fistula first" approach to hemodialysis access and should cause us to reconsider this approach when timely access is required.

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SS13.

Creating Functional Autogenous Vascular Access in Older Patients

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Objectives: Arteriovenous fistulas (AVFs) are the preferred choice for hemodialysis vascular access (VA); however, there is debate over the utility of AVFs in older patients, particularly concerning access maturation and functionality. We reviewed our VA experience in patients ≥ 65 years of age.

Methods: We analyzed consecutive VA patients ≥ 65 years old with access operations between March 2003 and November 2009. All patients had ultrasound vessel mapping. In addition to overall outcomes review, the data were stratified into three 10-year increments for further analysis. Patency rates refer to functional VA.

Results: 422 consecutive VA patients were included in this study. Ages were 65-94 years (mean = 73). 210 (49.7%) were female, 148 (35.1%) patients were diabetic and 93 (22.0%) were obese. 124 (29.4%) patients had previous access operations. AVFs constructed were radiocephalic in 30 (7.1%) patients, mid-arm direct AVFs in 278 (65.8%) individuals, and 114 (27.1%) transposition AVFs. No grafts were used for VA in any patient during the study period. Time to VA use was 0.5- 6 months (mean = 1.5 mos). Primary, primary assisted, and cumulative patency were 55.6%, 93.6%, and 96.6% at 12 months and 40.7%, 89.6%, and 93.6% at 24 months, respectively. Follow-up was 1.5-77 months (mean = 16.8 mos). Subgroup age stratification [65-74 (n = 240), 75-84 (n = 154), 85-94 (n = 28) years] found no difference in functional access outcomes. 149 patients died during the study period, 1.3-61 months (mean = 19 mos) after access creation. No deaths were related to access operations.

Conclusions: AVFs are feasible and offer functional and timely VA in older patients. There was no difference in functional access outcomes with subgroup age stratification. Overall cumulative patency was 96.6% at 12 months and 93.6% at 24 months.

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S3: SVS Plenary Session III

SS14.

Prior Failed Ipsilateral Percutaneous Vascular Intervention (PVI) in Patients With Critical Limb Ischemia Predicts Poor Outcome After Lower Extremity Bypass

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